



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/650,633

08/28/2003

Henry P. Gabryjelski

M1103.70660US00

7727

45840

7590

11/13/2009

WOLF GREENFIELD (Microsoft Corporation)
C/O WOLF, GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER

DANG, HUNG Q

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

11/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/650,633	Applicant(s) GABRYJELSKI ET AL.	
	Examiner Hung Q. Dang	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 and 32-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites, "176 KBps" which could mean either 176 Kilobit per second or 176 Kilobyte per second. It is not clear which rate is being claimed.

Claim 32 recites, "the device's internal media cache" and "the amount of data". There is insufficient antecedent basis for these limitations in the claim.

Claims 33-36 are rejected because they depend on claim 32 above.

Claim 33 further recites, "8 MB" which could mean either 8 Megabit or 8 Megabyte. It is not clear which size is being claimed.

Claim 35 further recites, "each amount of data is substantially equal in size." It is not clear what size each amount of data is equal to.

Claim 37 recites, "the device's internal media cache". There is insufficient antecedent basis for these limitations in the claim.

Claims 38-45 are rejected because they depend on claim 37 above.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Art Unit: 2621

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multimedia material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claim 50 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 50 recites “a data packet” which is only data and do not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claims 1-24 and 52-58 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 16-18 recite, “a system.” However, it is evidenced at least on page 5 lines 3-10 of the specification that such would be intended to refer to software, per se. This subject matter is not limited to that which falls within a statutory category of invention

Art Unit: 2621

because it is not limited to a process, machine, manufacture, or a composition of matter.

Software does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

.... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claim 51 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claim 2 recites "a computer-readable medium having stored thereon ... computer-executable components". However, the recited "computer-readable medium" could be reasonably interpreted as encompassing statutory media such as a "ROM", "RAM", "EPROM", "CD-ROM", etc, as well as non-statutory subject matter such as a magnetic, optical, electromagnetic, infrared, ... or propagation medium.

A "magnetic, optical, electromagnetic, infrared, ... or propagation medium" is neither a process nor a product, (i.e., a tangible "thing") and therefore does not fall

Art Unit: 2621

within one of the four statutory classes of § 101. Rather, a “magnetic, optical, electromagnetic, infrared, ... or propagation medium” is a form of energy, in the absence of any physical structure or tangible material.

The Examiner suggests amending the claim to recite the “computer-readable storage medium” as “computer-readable non-transitory storage medium” to include tangible computer readable media, while at the same time excluding the intangible media such as signals, carrier waves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claims 25-46 are rejected under 35 U.S.C. 101 the claimed invention is directed to non-statutory subject matter. .

Claim 25-46 are rejected under 35 U.S.C. 101 based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively

Art Unit: 2621

recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 8-14, 17-18, 25-40, 43-46, 53-55, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohta et al. (US Patent 6,330,214 – hereinafter Ohta).

Regarding claim 1, Ohta discloses a system that facilitates utilizing an optical medium, comprising: a component that provides concurrent recordation of and playback from an optical medium, the playback starting at time (t_x) and the recordation starting at time (t_y), wherein $t_x \neq t_y$ (*Fig. 2; column 2, lines 10-25; Figs.9- 10; Fig. 12; column 7, lines 7-38; column 11, lines 54 - column 12, line 55*).

Regarding claim 2, Ohta also discloses recordation refers to a non-real-time data stream (*column 4, lines 8-11 – wherein at least the stream of the video signal from an analog VTR is interpreted as a non-real-time data stream*).

Regarding claim 8, Ohta also discloses the optical medium comprising audio data (*column 16, lines 25-33*).

Regarding claim 9, Ohta also discloses at least one buffer that holds information from playback of the medium (*column 12, lines 36-64; column 16, lines 20-25*).

Regarding claim 10, Ohta also discloses the at least one buffer has a minimum buffer capacity, the minimum buffer capacity is a function of read speed and at least one seek time (*column 6, lines 15-40*).

Regarding claim 11, Ohta also discloses a buffer controller that controls at least one of creation and use of at least one buffer (*column 6, lines 15-40; "Integrated Buffer Memory 22" and "Memory Controller 27" of Fig. 1*).

Regarding claim 12, Ohta also discloses the buffer controller performs a utility-based analysis in connection with buffer access (*column 6, line 15 – column 8, line 31; column 16, lines 20-43*).

Regarding claim 13, Ohta also discloses the utility-based analysis based in part on a probabilistic-based determination of cost associated with saving data to the buffer (*column 6, line 15 – column 8, line 48*).

Regarding claim 14, Ohta also discloses, the utility-based analysis based in part on a probabilistic-based determination of cost associated with retrieving data from the buffer (*column 6, line 15 – column 8, line 48*).

Regarding claim 17, Ohta also discloses a component that provides concurrent playback of a plurality of data streams from the optical medium (*Fig. 14A; column 16, lines 26-33*).

Regarding claim 18, Ohta also discloses the data streams comprising audio data (*Fig. 14A; column 16, lines 25-33*).

Regarding claim 25, Ohta discloses a method of utilizing optical media comprising: initiating a first operation from the optical media at time t_x (*Fig. 2; column 2, lines 10-25; Figs.9- 10; Fig. 12; column 7, lines 7-38; column 11, lines 54 - column 12, line 55*); and initiating at least a second operation from the optical media at time t_y while the first operation is currently in progress, wherein $t_x \neq t_y$ (*Fig. 2; column 2, lines 10-25; Figs.9- 10; Fig. 12; column 7, lines 7-38; column 11, lines 54 - column 12, line 55*).

Regarding claim 26, Ohta also discloses the first operation comprising reading a real-time data stream (*column 4, lines 8-21*).

Regarding claim 27, Ohta also discloses the at least a second operation comprising one of reading a real-time data stream and a non-real-time data stream (*column 4, lines 8-21; column 16, lines 25-33*).

Regarding claim 28, Ohta also discloses transferring the real-time data stream to a first buffer for temporary storage at a sufficient rate to allow the data stream associated with the second operation to transfer to a second buffer without interrupting the first operation (*column 6, line 15 – column 8, line 31; column 16, lines 20-48*).

Regarding claim 29, Ohta also discloses before the second operation begins, determining whether a calculated cost of accessing the optical media exceeds any one

Art Unit: 2621

of the following: a threshold and a calculated cost of retrieving the data stored in the first buffer (*column 6, line 15 – column 8, line 48*); and retrieving the data from the first buffer during the second operation when the calculated cost of accessing the optical media exceeds at least one of the threshold and the cost of retrieving the data from the first buffer (*column 6, line 15 – column 8, line 48*).

Regarding claim 30, Ohta also discloses verifying data transfer capabilities of an optical hardware device that is employed to run the optical media (*column 6, line 15 – column 8, line 48*).

Regarding claim 31, Ohta also discloses verifying the data transfer capabilities comprising performing at least one of the following: checking the optical hardware device to determine whether it is running in constant angular velocity (CAV) mode, determining at least one of seek times and read performance across the optical media for reading a non-real time data stream from the optical media, and determining whether minimum buffer requirements are satisfied (*Fig. 6; column 6, line 15 – column 8, line 48*).

Regarding claim 32, Ohta also discloses determining read performance across the optical media to facilitate ascertaining the optical hardware device's ability to read the optical media comprising: reading at least a first amount of data from the optical media such that the device's internal media cache is not concurrently caching the first amount of data when the reading of the first amount of data starts (*column 7, lines 30-63; Fig. 6 – wherein at least the first amount of data corresponds to $3n$*); and skipping ahead an increment of time that is sufficient to gain characteristic read performances

Art Unit: 2621

across the optical media and repeat reading the amount of data from the optical media until substantially all of the optical media is read (*column 7, lines 30-63; Fig. 6 – wherein at least the skipped time corresponds to the time period between starting reading the first amount of data and start of phase 1*).

Regarding claim 33, Ohta also discloses the first amount of data being about 8 MB (*Fig. 6; wherein the amount of 3n of data is interpreted as about 8 MB*).

Regarding claim 34, Ohta also discloses the increment of time being about 5 minutes (*Fig. 6 - wherein at least the skipped time corresponds to the time period between starting reading the first amount of data and start of phase 1 and is interpreted as about 5 minutes*).

Regarding 35, Ohta also discloses each amount of data is substantially equal in size (*Fig. 6 – wherein each amount of data in “reproduction” periods is interpreted as substantially equal in size*).

Regarding claim 36, Ohta also discloses the amount of data is determined based at least in part upon the device's internal buffer size (*Fig. 6 – wherein the amount of data read in each “reproduction period” at least is determined to be less than the available capacity of the buffer*).

Regarding claim 37, Ohta also discloses determining seek times across the optical media to facilitate ascertaining the optical hardware device's ability to seek on the optical media comprising: dividing the optical media into a number of sections, the number of sections comprising at least a first section and at least a second section, such that the device's internal cache does not pre-cache the data from the second

Art Unit: 2621

section when told to read the start of the first section (*Fig. 6; column 6, lines 59-65; column 7, lines 42-63*); and for all pairs of sections comprising any two sections, ensuring the device is reading from the first section and then causing the drive to seek to the second section to gain characteristic seek performances across the optical media (*Fig. 6; column 6, lines 59-65; column 7, lines 42-63*).

Regarding claim 38, Ohta also discloses all sections are of substantially equal size (*Fig. 6 – wherein the amounts of data read on both sides of the “head move” period are interpreted as having substantially equal size*).

Regarding claim 39, Ohta also discloses the section size is determined based at least in part upon the device's internal buffer size (*Fig. 6 – wherein the amounts of data read on both sides of the “head move” period” is determined at least to be less than the available capacity of the buffer*).

Regarding claim 40, Ohta also discloses ensuring to read from the first section comprises reading an amount of data larger than the device's internal buffer size from some section other than the first and second sections (*Fig. 6 – wherein the device's internal buffer size is interpreted to $2n$, the amount of the data read to fill up to the level of $3n$ is interpreted as the data from some section other the first and second sections, the first section corresponds to the section contain the data read in phase 1 while the second section is interpreted as corresponding to that containing the data read in phase 3*).

Regarding claim 43, Ohta also discloses causing the drive to seek to the second section comprises using a SEEK command (*Fig. 6; column 7, lines 45-55*).

Regarding claim 44, Ohta also discloses the section size is about 5 minutes (*Fig. 6 - wherein at least the size of data in either "section" is interpreted as about 5 minutes*).

Regarding claim 45, Ohta also discloses ensuring to read from the second section comprises reading an amount of data larger than the device's internal buffer size from the first section (*Fig. 6 – wherein the device's internal buffer size is interpreted to $2n$, the amount of the data read to fill up to the level of $4n$ is interpreted as the data from first section while the second section is interpreted as corresponding to the section that contains the data read in phase 3*).

Regarding claim 46, Ohta also discloses the minimum buffer requirements being a function of read speed and seek times (*column 6, lines 15-40; column 7, lines 35-63*).

Regarding claim 53, Ohta discloses a recording system, comprising: a component that provides concurrent recordation of and playback of respective media from an optical medium, the playback starting at time (t_x) and the recordation starting at time (t_y), wherein $t_x \neq t_y$ (*Fig. 2; column 2, lines 10-25; Figs.9- 10; Fig. 12; column 7, lines 7-38; column 11, lines 54 - column 12, line 55*); and an artificial intelligence (AI) component that performs a utility-based analysis in connection with the recordation and playback (*column 6, line 15 – column 8, line 31; column 16, lines 20-43*).

Regarding claim 54, Ohta also discloses the AI component comprising a classifier (*column 6, line 15 – column 8, line 31; column 16, lines 20-43 – wherein at least it classifies between recordation vs. reproduction or between recording buffer vs. reproducing buffer etc.*).

Art Unit: 2621

Regarding claim 55, Ohta also discloses the AI component inferring when to initiate recordation (*Figs. 7-8*).

Regarding claim 58, Ohta also discloses the AI component comprising at least one of: a support vector machine (SVM), a naïve Bayes model, a Bayesian network, a decision tree, a Hidden Markov Model (HMM), neural network, data fusion engine (*column 6, line 15 – column 8, line 31 – wherein the AI component disclosed by Ohta involves a decision tree because the described process involves decision branches – at least when to refill the buffers with data*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-24 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta as applied to claims 1-2, 8-14, 17-18, 25-40, 43-46, 53-55, and 58 above.

Regarding claim 19, see the teachings of Ohta as discussed in claim 19 above. Further, Ohta also discloses the plurality of data streams comprising at least a first data stream and at least a second data stream, such that the first data stream starts playing at t_x and the second data stream starts playing at t_y (*column 16, lines 20-33*). Ohta does not explicitly disclose $t_x \neq t_y$.

Official Notice is taken that users in Ohta can select different starting times for playing back each of the plurality of data streams according to their convenience.

Regarding claim 20, see the teachings of Ohta as discussed in claim 1 above. Further, Ohta also discloses a continuity component that provides concurrent reproduction of a plurality of data streams in parallel from the optical medium (*column 16, lines 20-33*).

However, Ohta does not explicitly disclose concurrent recordation of a plurality of data streams in parallel from the optical medium.

Official Notice is taken that recording of reproduced data streams are well known in the art. Therefore, it would have been obvious to one skilled in the art to incorporate allowing users to plug in any recording devices into the output terminals of the system disclosed by Ohta to record the reproduced data streams as they desire. The incorporated feature would enhance the output interface of the system.

Claim 21 is rejected for the same rationale as described in claims 19 and 20 above.

Regarding claim 22, Ohta also discloses the continuity component analyzes a subset of the data streams and dynamically orders reading of respective data streams of the subset to mitigate stream break-up (*column 16, lines 25-43*).

Regarding claim 23, Ohta also discloses the continuity component analyzes a subset of the data streams and dynamically prognoses potential starvation of any of the data streams, and takes remedial action to mitigate the starvation (*column 16, lines 25-43*).

Art Unit: 2621

Regarding claim 24, Ohta also discloses the continuity component employs a probabilistic-based utility analysis in connection with providing a prognosis (*column 6, line 15 – column 8, line 48; column 16, lines 25-43*).

Regarding claim 49, Ohta discloses a method of utilizing optical media comprising: starting to read at least a first non-real-time data stream from the optical media at time t_x (*column 16, lines 20-33*); and starting to read at a least a second non-real time data stream from the optical media concurrently with the first non-real-time data stream at time t_y (*column 16, lines 20-33*). Ohta does not explicitly disclose t_x is not equal to t_y .

Official Notice is taken that users in Ohta can select different starting times for playing back each of the plurality of data streams according to their convenience.

Claims 3-4, 47-48, and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta as applied to claims 1-2, 8-14, 17-40, 43-46, 49, 53-55, and 58 above, and further in view of Kitamura (US Patent 7,286,601 – hereinafter Kitamura).

Regarding claim 3, see the teachings of Ohta as discussed in claim 1 above. However, Ohta does not disclose playback refers to a real-time data stream.

Kitamura discloses playback refers to a real-time data stream (*column 2, lines 58-64*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kitamura into the system disclosed by

Art Unit: 2621

Ohta in order to play back real-time data streams without recording the stream first. The incorporated feature would enhance the playback interface of the system.

Regarding claim 4, Kitamura also discloses the component dynamically adjusts required data rates for the real-time data stream (*column 4, lines 22-38*).

Regarding claim 47, Ohta discloses a method of utilizing optical media comprising: starting to read at least a first data stream from the optical media at time t_x ; and starting to read at a least a second data stream from the optical media concurrently with the first data stream at time t_y (*column 16, lines 20-33*). Ohta does not explicitly disclose $t_x \neq t_y$ and the data streams to be real-time data streams.

Kitamura discloses playback a real-time data streams (*column 2, lines 58-64*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kitamura into the system disclosed by Ohta in order to play back real-time data streams without recording the stream first. The incorporated feature would enhance the playback interface of the system.

However, Ohta and Kitamura do not explicitly disclose $t_x \neq t_y$.

Official Notice is taken that users in Ohta can select different starting times for playing back each of the plurality of data streams according to their convenience.

Regarding claim 48, Ohta also disclose the first data stream being played via a first playback output and the second data stream being played via a second playback output (*column 16, lines 20-33*).

Regarding claim 50, Ohta also discloses a data packet adapted to be transmitted between two or more computer processes facilitating reading multiple concurrent data

Art Unit: 2621

streams from optical media, the data packet comprising: information associated with reading a data stream from the optical media at time t_x and concurrently reading a non-real-time data stream from the optical media at time t_y (*column 16, lines 20-33*).

Ohta does not explicitly disclose $t_x \neq t_y$ and the data streams to be real-time data streams.

Kitamura discloses playback a real-time data streams (*column 2, lines 58-64*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kitamura into the system disclosed by Ohta in order to play back real-time data streams without recording the stream first. The incorporated feature would enhance the playback interface of the system.

However, Ohta and Kitamura do not explicitly disclose $t_x \neq t_y$.

Official Notice is taken that users in Ohta can select different starting times for playing back each of the plurality of data streams according to their convenience.

Claim 51 is rejected for the same reason as discussed in claim 50 above.

Claim 52 is rejected for the same reason as discussed in claim 50 above.

Claims 5-7, 15-16, and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta as applied to claims 1-2, 8-14, 17-40, 43-46, 49, 53-55, and 58 above, and further in view of Osakabe (US Patent 6,894,961 – hereinafter Osakabe).

Regarding claim 5, see the teachings of Ohta as discussed in claim 1 above. However, Ohta does not disclose a verification component that determines data transfer capabilities of the optical medium.

Osakabe discloses a verification component that determines data transfer capabilities of the optical medium (*column 1, line 39 – column 2, line 30*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Osakabe into the system disclosed by Ohta in order to permit recording with minimized errors (*Osakabe: column 1, lines 44-49*).

Regarding claim 6, Osakabe also discloses the data transfer capabilities comprising at least one of minimum data transfer rate, read speed, burn speed, seek times and buffer size (*column 1, line 39 – column 2, line 30*).

Regarding claim 7, Osakabe also discloses the optical medium comprising at least one of: a compact disc and a digital video disc (DVD) (*column 5, lines 19-22*).

Regarding claim 15, Osakabe also discloses the optical medium has a guaranteed minimum data transfer rate (*column 1, line 39 – column 2, line 30*).

Regarding claim 16, Osakabe also discloses the guaranteed minimum data transfer rate is at least about 176 KBps (*column 1, line 39 – column 2, line 30; Table 4; column 8, lines 35-61 - wherein speed of 1X corresponds to 150 KBps - see paragraph [0003] of Green for support*).

Claim 56 is rejected for the same reason as discussed in claim 5 above.

Claim 57 is rejected for the same reason as discussed in claim 6 above.

Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta as applied to claims 1-2, 8-14, 17-40, 43-46, 49, 53-55, and 58 above, and further in view of King et al. (US 2002/0169996 – hereinafter King).

Art Unit: 2621

Regarding claim 41, see the teachings of Ohta as discussed in claim 37 above. However, Ohta does not disclose ensuring to read from the first section comprises sending a READ I/O command with a force unit access (FUA) bit set to one.

King discloses sending a READ I/O command with a force unit access (FUA) bit set to one ([0013]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of King into the method disclosed by Ohta in order to provide reliability of data (King: [0013]).

Claim 42 is rejected for the same reason as discussed in claim 41 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621